

US006347725B1

(12) United States Patent

Yoakim et al.

(10) Patent No.: US 6,347,725 B1

(45) **Date of Patent:** Feb. 19, 2002

(54) CLOSED FLEXIBLE SACHET

(75) Inventors: Alfred Yoakim, La Tour-de-Peilz;

Alain Mariller, Yvonand, both of (CH)

(73) Assignee: Nestec S.A., Vevy (CH)

(*) Notice: Subject to any disclaimer, the term of this

patent is extended or adjusted under 35

U.S.C. 154(b) by 0 days.

(21) Appl. No.: 09/482,274

(22) Filed: Jan. 13, 2000

Related U.S. Application Data

(63) Continuation-in-part of application No. PCT/EP98/03826, filed on Jun. 23, 1998.

(51)	Int. Cl. ⁷		B67D	5/00
------	-----------------------	--	-------------	------

(56) References Cited

U.S. PATENT DOCUMENTS

3,224,640 A	* 12/1965	Schneider et al 222/94
3,388,836 A	* 6/1968	Otto et al 222/107
3,508,878 A	* 4/1970	Gunders 222/107
3,913,789 A	* 10/1975	Milller 222/107
4,220,259 A	9/1980	Lagneax 222/82
4,650,452 A	* 3/1987	Jensen 222/107
4,759,472 A	* 7/1988	Strenger 222/92

4,890,744	Α	*	1/1990	Lane, Jr. et al	222/92
5.114.033	Α	*	5/1992	Golias et al	222/82

FOREIGN PATENT DOCUMENTS

EP	512 470	11/1992
FR	2 228 374	11/1974
GB	2 215 189	9/1989
WO	WO 94/01344	1/1994

^{*} cited by examiner

Primary Examiner—Joseph A. Kaufman (74) Attorney, Agent, or Firm—Winston & Strawn

(57) ABSTRACT

The invention is directed to a closed flexible sachet in the form of an individual portion provided for extraction under pressure, containing ground roast coffee, which sachet includes two identical flexible sheets or a single folded flexible sheet of circular, oval or polygonal shape. A space for a powdered beverage is created between the two sheets or between the two faces of the folded sheet. The two sheets or the two faces of the folded sheet are welded over their periphery so that the sachet is substantially symmetrical with respect to its welding plane. The sachet is opened through the rise in pressure which takes place upon injection of an extraction fluid, in which the two flexible sheets or the two faces of the folded sheet extend over one side of the sachet beyond their welding line to provide, between the sheets or between the two faces of the folded sheet, a channel which allows the arrival of the extraction fluid. The channel is substantially perpendicular to the welding line from which it emerges.

24 Claims, 5 Drawing Sheets

